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EXAMINER	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/617,067
Filing Date: July 16, 2000
Appellant(s): PAPALIA ET AL.

Philip H. Burrus, IV
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/03/2004

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Invention

The summary of invention contained in the brief is deficient because limitations set up in the summary are not in line with the claimed invention. Specifically, summary states that "an Agregator provides power machines to a plurality of customers, generally free of charge". There is neither Aggregator, no a plurality of customers recited in the claims. The "free or charge" limitation is not recited in the claims either. Furthermore,

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

US 5,237,507	Chasek	8-1993
US 6,281,601	Edelman et al.	8-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4-8, 10-19 and 22 are unpatentable under 35 U.S.C. 103(a) over Chasek (US 5,237,507) in view of Edelman et al. (US 6,281,601).

Chasek teaches a system for developing real-time economic incentives to encourage efficient use of the resources of a regulated electric utility, comprising:

Independent Claims.

Claim 1. A system comprising:

a plurality of power machines (generators) disposed in the power plant (102) (Fig. 1; C. 2, L. 7; C. 3, L. 53), said power machines are connected to a utility's central computer (103) (control means) via recording meter (112) (C. 3, L. 51-56);

said (remote) control means further including:

a power pool (grid) central computer (105) connected to the utility's central computer (103), said computers (103) and (105) are connected to an export energy sample meter (114), wherein said computer (105) processes export energy information

along with estimated upcoming demand-related prices determined in the utility's central computer (103) (C. 3, L. 58 – C. 4, L. 1);

a means for monitoring a market price of electricity (C. 5, L. 51-54);

a means for monitoring a market price of hydrocarbon fuels (C. 5, L. 40-49; C. 4, L. 56);

a means for calculating the difference between the market price of electricity and hydrocarbon fuel (C. 8, L. 41-51; C. 4, L. 14-22);

a means for evaluating current demand for each generator and weather data (*local data*) (C. 5, L. 18-19, 59-60; C. 6, L. 37-40).

While operation of a generator to produce electric energy inherently indicates means for actuating said generator, Chasek, however, does not specifically teach said actuating means.

Edelman et al. (Edelman) teaches a system and method for a distributed generation power networking system, comprising a turbo-generator, and a control circuitry (which appears to be remote) for controlling operation of said generator by generating and transmitting a *signal* to turn said generator on and off, said control circuitry generates said signal based on evaluation of local demand (*local data*) (C. 4, L. 59 – C. 5, L. 7; C. 6, L. 30-40). Furthermore, Edelman teaches a *plurality* of generators which can be controlled in the same way (C. 5, L. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chasek to include a means for actuating said generators, said means including a control circuitry for controlling operation of said generators by generating and transmitting a signal to turn said generators on and off, said control circuitry generating said signal based on evaluation of local demand; as disclosed in Edelman, because it would advantageously allow to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system (Edelman; C. 1, L. 47-55).

Information as to "*wherein after the remote means for actuating the power machines transmits an actuation signal to the power machines, the control circuitry*

evaluates local data stored therein prior to actuating the power machines", directed to method steps. So as the claimed invention is directed to *a system,* said language is given no patentable weight.

MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation." Therefore, in this particular case, while addressing the structural limitations of the claim the Examiner considered said language as being non-functional.

Claim 10. A system comprising:

a plurality of power machines (generators) disposed in the power plant (102) (Fig. 1; C. 2, L. 7; C. 3, L. 53), said power machines are connected to a utility's central computer (103) (control means) via recording meter (112) (C. 3, L. 51-56);

said (remote) control means further including:

a power pool (grid) central computer (105) connected to the utility's central computer (103), said computers (103) and (105) are connected to an export energy sample meter (114), wherein said computer (105) processes export energy information along with estimated upcoming demand-related prices determined in the utility's central computer (103) (C. 3, L. 58 – C. 4, L. 1);

a means for monitoring current demand for each generator and weather data (*local data*) (C. 5, L. 18-19, 59-60; C. 6, L. 37-40).

a means for monitoring a market price of electricity and price of hydrocarbon fuels (a means for considering electricity generation factors) (C. 5, L. 40-54; C. 4, L. 56);

said (remote) control means further including:

a means for calculating the difference between the market price of electricity and hydrocarbon fuel (C. 8, L. 41-51; C. 4, L. 14-22);

a means for communication between said (remote) control means and said generators (a telephone network) (C. 7, L. 39-40; C. 3, L. 66-67).

While operation of a generator to produce electric energy inherently indicates means for actuating said generator, Chasek, however, does not specifically teach said actuating means.

Edelman teaches a system and method for a distributed generation power networking system, comprising a turbo-generator, and a control circuitry (which appears to be remote) for controlling operation of said generator by generating and transmitting a *signal* to turn said generator on and off, said control circuitry generates said signal based on evaluation of local demand (*local data*) (C. 4, L. 59 – C. 5, L. 7; C. 6, L. 30-40). Furthermore, Edelman teaches dispatch logic based on minimum operating setpoint of said generator to *prevent repetitive starting and stopping* of said generator (C. 7, L. 21-24), thereby indicating "override" feature. Furthermore, Edelman teaches a *plurality* of generators which can be controlled in the same way (C. 5, L. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chasek to include a means for actuating said generators, said means including a control circuitry for controlling operation of said generators by generating and transmitting a signal to turn said generators on and off, said control circuitry generating said signal based on evaluation of local demand, as disclosed in Edelman, because it would advantageously allow to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system (Edelman; C. 1, L. 47-55).

Language as to: "*wherein the control circuitry evaluates the local data after receipt of the actuation signal; further wherein the control circuitry omits evaluation of the local data upon receipt of the override signal*" is directed to a method steps. So as claimed invention is directed to *a system,* said language is given no patentable weight.

MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation." Therefore, in this particular case, while addressing the structural limitations of the claim the Examiner considered said language as being non-functional.

Dependent Claims.

Claim 2. Edelman teaches said system, comprising a control circuitry for controlling operation of said generator by generating and transmitting a *signal* to turn said generator on (C. 1, L. 56 – C. 2, L. 5). The motivation to combine Chasek with Edelman would be to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system.

Claim 4. Edelman teaches said system comprising a control circuitry (which appears to be remote) for controlling operation of said generator by generating and transmitting a (override) signal to turn said generator on and off (C. 4, L. 13 – C. 5, L. 58). The motivation to combine Chasek with Edelman would be to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system.

Claim 5. Chasek teaches said system, comprising a means for reading data from a meter (C. 3, L. 51-57).

Claim 6. Edelman teaches said system, further comprising a means for reading data related to the operational performance of said generator (C. 1, L. 56 – C. 7, L. 64). The motivation to combine Chasek with Edelman would be to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system.

Claim 7. Chasek teaches said system, further comprising a means for reading the local energy rate structure (C. 3, L. 42 – C. 4, L. 36).

Claim 8. Chasek teaches said system, further comprising a means for calculating the load demand and printing and preparing a billing statement (C. 4, L. 9-11, 50-65).

Claim 11. Chasek teaches said system, further comprising a means for aggregating power to sell on a power market (C. 4, L. 13-22).

Claim 12. Chasek teaches said system, further comprising a means for generating a billing statement (C. 4, L. 13-22).

Claim 13. Chasek teaches said system, wherein the electricity generation factor is selected from the group consisting of market rate structure, peak shaving information, load shedding information and information relating to *the ability to sell power to the grid* (C. 4, L. 13-22).

Claim 14. Chasek teaches said system, which operates in a competitive environment (C. 4, L. 43).

Claim 15. Chasek teaches said system, further comprising a means for calculating the load demand and to print and prepare a billing statement (C. 4, L. 9-11, 50-65).

Claim 16. Chasek teaches said system, further comprising a means for selling power to the grid (C. 4, L. 14-22).

Claim 17. Edelman teaches said system, which participates in load shedding (C. 1, L. 56-67). The motivation to combine Chasek with Edelman would be to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system.

Claim 18. Edelman teaches said system, which participates in peak shaving (C. 1, L. 56 – 67). The motivation to combine Chasek with Edelman would be to implement power generation control strategies for meeting the local demand while reducing the starting and stopping of the generators, thereby increasing the overall efficiency of the system.

Claim 19. Chasek teaches said system, wherein the data is selected from the group consisting of electricity prices, *hydrocarbon prices*, *load demand, and weather* (C. 4, L. 56; C. 6, L. 38-39).

Claim 22. Chasek teaches said system comprising means for monitoring operational condition of said generator (C. 5, L. 40-50).

Dependent claim 21 is unpatentable under 35 U.S.C. 103(a) over Chasek in view of Edelman and further in view of Norris et al. (US 5,510,780).

Claim 21. Chasek in view of Edelman teach all the limitations of **claim 21**, except specifically teaching a distributor capable of licensing the power machines.

Norris et al. (Noris) teaches a system for controlling a power-generation equipment wherein said equipment is leased (C. 1, L. 6-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chasek and Edelman to include licensing of power machines, as disclosed in Norris, because it would advantageously increase revenue thereby make it more attractive to the customers.

Futhermore, Information as to "*a distributor capable of licensing the power machines*" is suggestive language and not given patentable weight. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. MPEP 2106.

(10)

Issue I

Applicant argues, that Chasek in view of Edelman (combination) fails to disclose control circuitry that evaluates local data *after the receipt of a control signal and before actuation of the power machines.* Specifically, the Applicant argues that Edelman, while teaching circuitry for providing a control signal to the power machine, *does not include means for evaluating data like the price of electricity and hydrocarbons* (fuel for generators) upon the receipt of a command signal; and Chasek, while teaching a central utility computer that monitors temperature and demand, do*es not disclose control*

circuitry coupled to the power machine for evaluating local data after receiving a control signal from the central computer.

In response to this argument, the Examiner stipulates that Chasek teaches a electric utility system wherein operation of power machines (generators) is controlled based on the *market prices of electricity, generator fuels and local data (local demand and temperature)*. Specifically, Chasek teaches a control means including a utility's central computer (103) connected to power machines via recording meter (112) (C. 3, L. 51-56), a power pool (grid) central computer (105) connected to the utility's central computer (103), said computers (103) and (105) are connected to an export energy sample meter (114), wherein said computer (105) processes export energy information along with estimated upcoming demand-related prices determined in the utility's central computer (103) (C. 3, L. 58 – C. 4, L. 1). Furthermore, Chasek teaches a means for monitoring a market price of electricity (C. 5, L. 51-54), a means for monitoring a market price of hydrocarbon fuels (C. 5, L. 40-49; C. 4, L. 56), a means for calculating the difference between the market price of electricity and hydrocarbon fuel (C. 8, L. 41-51; C. 4, L. 14-22), and a means for evaluating current demand for each generator and weather data (*local data*) (C. 5, L. 18-19, 59-60; C. 6, L. 37-40).

Edelman was applied to show control circuitry coupled to a generator to produce a *control signal for turning said generator on and off*. Furthermore, Edelman teaches

that *generation of said signal is based on evaluation of local demand (local data)* (C. 4, L. 59 – C. 5, L. 7; C. 6, L. 30-40).

Language as to "*wherein* control circuitry evaluates local data *after the receipt of a control signal and before actuation of the power machines"* appears to be directed to method steps. So as the claimed invention is directed to *a system,* said language is given no patentable weight.

MPEP 2106 (II) (C) states: "*Language that suggests or makes optional but* does not require steps to be performed or *does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.*" Therefore, in this particular case, while addressing the structural limitations of the claim, the Examiner considered said language as being non-functional.

Issue II

Applicant argues, that neither of the references teaches the control circuitry *omitting evaluation of the local data upon receipt of the override signal.*

In response to this argument, the Examiner stipulates that Chasek teaches a electric utility system wherein operation of power machines is controlled based on the *market prices of electricity, generator fuels and local data (local demand and temperature).*

Edelman was applied to show control circuitry coupled to a generator to generate a control signal for turning said generator on and off, wherein said control circuitry generates said signal based on evaluation of local demand (local data) (C. 4, L. 59 – C. 5, L. 7; C. 6, L. 30-40). Furthermore, Edelman teaches dispatch logic based on minimum operating setpoint of said generator to *prevent repetitive starting and stopping of said generator* (C. 7, L. 21-24), thereby indicating "override" feature.

Language as to "*wherein the control circuitry omits evaluation of the local data upon receipt of the override signal"* appears to be directed to method steps. So as the claimed invention is directed to *a system,* said language is given no patentable weight.

MPEP 2106 (II) (C) states: "*Language that suggests or makes optional but* does not require steps to be performed or *does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.*" Therefore, in this particular case, while addressing the structural limitations of the claim, the Examiner considered said language as being non-functional.

Issue III

Applicant argues, that neither of the references teaches the control circuitry *omitting evaluation of the local data upon receipt of the override signal.*

In response to this argument, the Examiner stipulates that Chasek teaches a electric utility system wherein operation of power machines is controlled based on the

market prices of electricity, generator fuels and local data (local demand and temperature).

Edelman was applied to show control circuitry coupled to a generator to generate a control signal for turning said generator on and off, wherein said control circuitry generates said signal based on evaluation of local demand (local data) (C. 4, L. 59 – C. 5, L. 7; C. 6, L. 30-40). Furthermore, Edelman teaches dispatch logic based on minimum operating setpoint of said generator to *prevent repetitive starting and stopping of said generator* (C. 7, L. 21-24), thereby indicating "override" feature.

Language as to "*wherein the control circuitry omits evaluation of the local data upon receipt of the override signal"* appears to be directed to method steps. So as the claimed invention is directed to *a system,* said language is given no patentable weight.

MPEP 2106 (II) (C) states: "*Language that suggests or makes optional but* does not require steps to be performed or *does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.*" Therefore, in this particular case, while addressing the structural limitations of the claim, the Examiner considered said language as being non-functional.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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IB
February 22, 2005

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